

implanting an impurity into one region of the semiconductor adjacent to the member by ion irradiation with the member and a mask material as masks;

removing the mask materials; and

doping another region of the semiconductor located adjacent to the member and opposite to the one region with an impurity having one conductivity type to form the another region to a depth shallower than that of the one region,

wherein the one region is not in contact with the another region.

16. (Amended) A method for forming a memory comprising:
forming a gate member comprising a floating gate, a control gate and an oxide provided on surfaces of the floating gate and the control gate on a single crystal substrate;

implanting an impurity into one region of the substrate adjacent to the member by ion irradiation with the member and a mask material as masks;
removing the mask material; and

doping another region of the substrate located adjacent to the member and opposite to the one region with an impurity having one conductivity type[,] to form the another region to a depth shallower than that of the one region,

wherein the one region is not in contact with the another region.

17. (Amended) A method for forming a memory comprising:
forming a gate electrode having a floating gate on a semiconductor;
forming a mask material on one region of the semiconductor;
introducing an impurity into another region of the semiconductor by ion implantation using the gate electrode and the mask material as masks;

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(nd)

removing the mask material; and
introducing the impurity into the one region[,] to form the one region
to a depth shallower than that of the another region,
wherein the one region is not in contact with the another region.

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36. (Amended) A method for forming a memory comprising:
forming a gate electrode having a floating gate on a semiconductor;
forming a mask material on one region of the semiconductor;
introducing an impurity into another region of the semiconductor by
ion implantation using the gate electrode and the mask material as masks;
removing the mask material; and
introducing the impurity into the one region, to form the one region
to a depth shallower than that of the another region,
wherein the another region overlaps with the gate electrode more
widely than the one region overlaps with the gate electrode, and wherein the
one region is not in contact with the another region.

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21 41. (Amended) A method for forming a memory comprising:
forming a gate electrode having a floating gate on a semiconductor;
forming a mask material on one region of the semiconductor;
introducing an impurity into another region of the semiconductor by
ion implantation using the gate electrode and the mask material as masks[,]
to extend the another region under the gate electrode;
removing the mask material; and
introducing the impurity into the one region,
wherein the another region overlaps with the gate electrode more
widely than the one region overlaps with the gate electrode, and wherein the
one region is not in contact with the another region.

25 45. (Amended) A method for forming a MOS device comprising:
forming at least two gate electrode portions each having a floating
gate on a semiconductor;

forming mask materials on at least two first regions of the
semiconductor;

introducing an impurity into at least one second region of the
semiconductor by ion implantation using the gate electrode portions and the
mask materials[,] to extend the second region under the gate electrode
portions;

removing the mask materials; and

introducing the impurity into the first regions,

wherein the second region overlaps with the gate electrode portions
more widely than the first regions overlap with the gate electrode portions,
and wherein the first regions are not in contact with the second region.

26 46. (Amended) A method for forming a MOS device comprising:
forming at least two gate electrode portions each having a floating
gate on a semiconductor;

forming mask materials on at least two first regions of the
semiconductor;

introducing an impurity into at least one second region of the
semiconductor by ion implantation using the gate electrode portions and the
mask materials[,] to extend the second region under the gate electrode
portions;

removing the mask materials; and

introducing the impurity into the first regions[,] to form the first
regions to a depth shallower than that of the second region,
wherein the first regions are not in contact with the second region.

29 49. (Amended) A method for forming a MOS device comprising:
introducing an impurity into a semiconductor by ion implantation
using at least two gate electrode portions each including a floating gate and
a mask material as masks[,] to form at least one deep impurity region; and
introducing the impurity into the semiconductor using the gate
electrode portions as masks[,] to form at least two shallow impurity regions,
wherein the deep impurity region is not contact with the two shallow
impurity regions.

33 C9 Please add new claim 53 as follows:
33 --53. A method for forming a memory comprising:
forming a gate electrode portion having a floating gate on a
semiconductor;
introducing an impurity into one region of the semiconductor; and
introducing the impurity into another region of the semiconductor[,]
to form the another region to a depth deeper than that of the one region,
wherein the another region overlaps with the floating gate and is not
in contact with the one region.--